H*WIND Operational Quick Reference

1. Click *Launch H*Wind*

   This will bring up H*Wind's main window

2. Login into the database by clicking the **Login** button on the status bar and then typing in a username and password on the lower left panel.

3. Select an event by clicking on the atcf event identifier

   A storm track will appear on the map and track panel

4. Click on the Auto Pilot button, located on the status bar, and select a UTC time. The UTC time should be closest to the forecast advisory time.

   In this mode, H*Wind will check for new observations and storm track positions every ten minutes up until the UTC time selected.

   Users will have to monitor the track window to see if any new storm positions have appear and adjust the track if needed.

   NOTE: 12 hours is the maximum time period allowed for loading observations

   For operational use: The maximum time range for loading observations should not exceed 5-6 hours. However, this is up to the user's discretion

5. **Zoom** in/out, **Inspect/Edit**, and **Flag** the data as you see fit.

   NOTE:

   - the triangle indicates the max. wind speed for each platform type

   - the square indicates the latest ob (UTC time) for each platform type

   - the circled NOAA/AF obs indicate flight-level winds that have been surface adjusted

   - the diamonds indicate the radius of maximum wind (NOAA/AF flight-level winds only) per storm relative quadrant of the storm. There will be a total of four (NE/SE/SW/NW) indicated RMWs.

   For operational use: There are 3 ways to adjust aircraft flight-level data to the surface. Two methods are found under the Operations menu under **Aircraft adjustments**. Select **Surface adjustment** or **User-defined reduction**. The third method is a platform. Select either AFRES_OCEANIC or NOAA_OCEANIC from the observations panel. It is best to compare these methods against each other and see which one best represents surface winds.

   For operational use: If there isn't data coverage over a large area of the storm, it may be helpful to bring in a background field consisting of the data from a previous analysis of

the storm; if there is a previous analysis available. To do so, click **Load Background Field** under the **Operations** menu and select the most recent data set. The data will come into the list of platforms on the Observations window and must be included like all other platforms. The background field data does not weigh heavily on the analysis, however it may be beneficial to the accuracy of your analysis to flag the background field wherever you have more recent data.

6. Once all the data in the QC Client window is quality controlled, click on QC Set pull down menu and select **Analyze**

7. You *MUST* chose an analysis mode and the event type of the storm before moving on. Click **Analyze** to perform a surface wind analysis.

   NOTE: This process may take up to 7-10 minutes so make sure there is ample time to view, accept, and deliver the wind analysis to the Hurricane Specialist by the forecast advisory time.

   Things of consider when viewing the analysis

   - Does the radii look reasonable?

   - Is the maximum surface wind speed where you think it should be?

   - Are there any spurious data that should be removed with further quality controlling?

   If this doesn't look right, you can go back and redo the H*Wind analysis.

8. Once the analysis is done there will be a message stating where the analyses are located. Analysis output is located on http://cat5.nhc.noaa.gov

   - -Follow the series of directory tree to obtain the analysis

   - -There are three analysis output images
     2 degree, 4 degree and 8 degree images

9. Select an image to be printed to give to the Hurricane Specialists. The image should include all significant wind radii (34 kt, 50 kt, and 64 kt) contours.

10. If you are satisfied with the analysis, save the QC set by selecting **Save** under the **QC Set** drop down menu in the **QC Client window**. This will save all work performed on the data for your analysis.

11. Click on the box to generate an ATCF file.

12. Exit H*Wind by selecting **Exit** under the **QC Set** drop down menu